

# ***Multi-Species Conservation Strategy***

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1. Establish conservation goals.
2. Analyze the effects of CALFED Program actions.
3. Specify programmatic conservation measures.
4. Provide expedited ESA/CESA/NCCPA compliance process for individual CALFED Program actions.
5. Provide foundation for assurances and regulatory certainty.
6. Provide basis for commitment to implement conservation measures as part of CALFED Program.



# ***Scope of the Multi-species Conservation Strategy (MSCS)***

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Geographic area encompassed by MSCS

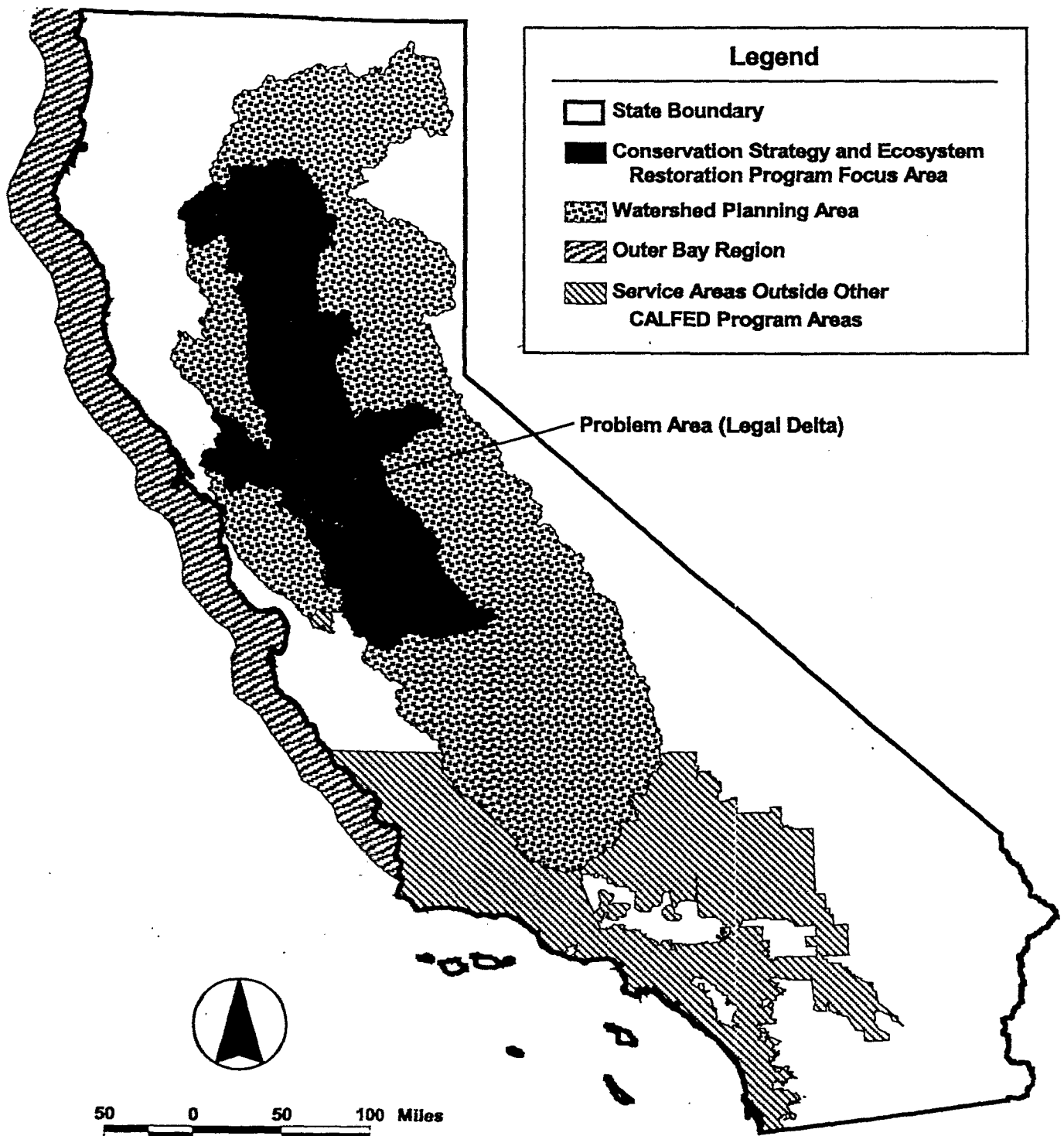
- focus area - ERP Ecological Management Zones and potential reservoir sites
- service area
- watershed planning area

Habitats and Species evaluated in the MSCS

- 242 species evaluated
- 18 habitat types



Figure 1-2: CALFED Program Areas



# 18 Habitat Types

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- Tidal perennial
- Valley riverine
- Montane riverine
- Lacustrine
- Saline emergent
- Tidal freshwater marsh
- Nontidal freshwater marsh
- Natural seasonal wetland
- Managed seasonal wetland

- Valley/foothill riparian
- Montane riparian
- Grassland
- Inland dune scrub
- Upland scrub

- Valley foothill woodland  
and forest

- Upland cropland
- Seasonally flooded  
agricultural land

*Montane Woodland  
& forest*



# ***Two Fish Groups***

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## **Anadromous fish**

chinook salmon, steelhead, green sturgeon

## **Estuarine Fish**

tidewater goby, delta smelt, longfin smelt, Sacramento splittail, and Sacramento perch



## Selection of Evaluated Species

- Listed, proposed and candidate pursuant to CESA and FESA
- Sensitive species (CDFG species of special concern, CNPS lists 1a, 1b, 2 and 3)
- Other potentially declining species in the MSCS focus area

## Covered Species

- Species for which the program provides for their conservation based on:
  - Achieving specified conservation goals
  - Implementation of take avoidance and minimization measures
  - Implementation of mitigation measures



# ***Key Elements of the MSCS***

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- Conservation goals
- Conservation Measures  
*specific actions*
- Monitoring *CMAAP*
- Adaptive Management



# ***Species Conservation Goals***

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- **R = Recovery**

(Species with a significant portion of their range within the MSCS focus area)

*delta smelt, steelhead, chinook salmon, green sturgeon, Lange's metal mark, Mason's lilaeopsis*

- **r = Contributes to recovery**

(Species with only a portion of their range within the MSCS focus area)

*Sacramento perch, riparian brush rabbit, yellow-billed cuckoo, Swainson's hawk, northern black walnut, giant garter snake*

- **m = maintain**

(Species minimally affected by CALFED actions within the MSCS focus area)

*tidewater goby, San Joaquin kit fox, California least tern, red-legged frog, vernal pool fairy shrimp, mad-dog skullcap*





# ***Examples of MSCS Conservation Goals***

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## R species

- Green sturgeon
  - Maintain a population of >1,000 mature fish (>1 meter in length) with a minimum of 500 females >1.3 meters, for a 50 yr. period, or 5 generations
- Lange's metalmark butterfly
  - Expand size of Antioch dunes population
  - Achieve the recovery goals identified in USFWS recovery plan
- Mason's lilaeopsis
  - Expand suitable habitat by 100 linear miles
  - Protect 90% of existing habitat
  - Protect 90% of the high quality existing habitat

*Antioch dunes  
recovery plan  
are R or S*



# ***Examples of MSCS Conservation Goals***

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r species

- Sacramento perch
  - Establish multiple self-sustaining populations in the central valley
- Swainson's hawk
  - Increase Central Valley breeding pairs from 1,000 to 2,000
- northern California black walnut
  - Establish 5-10 naturally regenerating black walnut stands within the species' historic range



# ***Examples of MSCS Conservation Goals***

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## **R species**

- **Green sturgeon**
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  - Expand size of Antioch dunes population
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*note: for  
only they are R or S*



Habitat Goals - as stated in:

- ERPP
- Strategic Plan for the Ecosystem Restoration Program

## Achieving the Conservation Goals

- ERPP actions - Restore & enhance 12,000 - 18,000 ACS Riparian
- State and federal actions - SB 1086, RHJV
- Actions specific mitigation R2-establishment or restoration after construction activities.
- Scientific Review
- Other



# ***CALFED Programs Addressed in the MSCS***

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- Levee system integrity
- Water quality
- Ecosystem restoration
- Water use efficiency
- Water transfer
- Watershed
- Storage
- Conveyance

Effects of each program were evaluated based on habitat types

Associated conservation measure(s) by habitat type specified



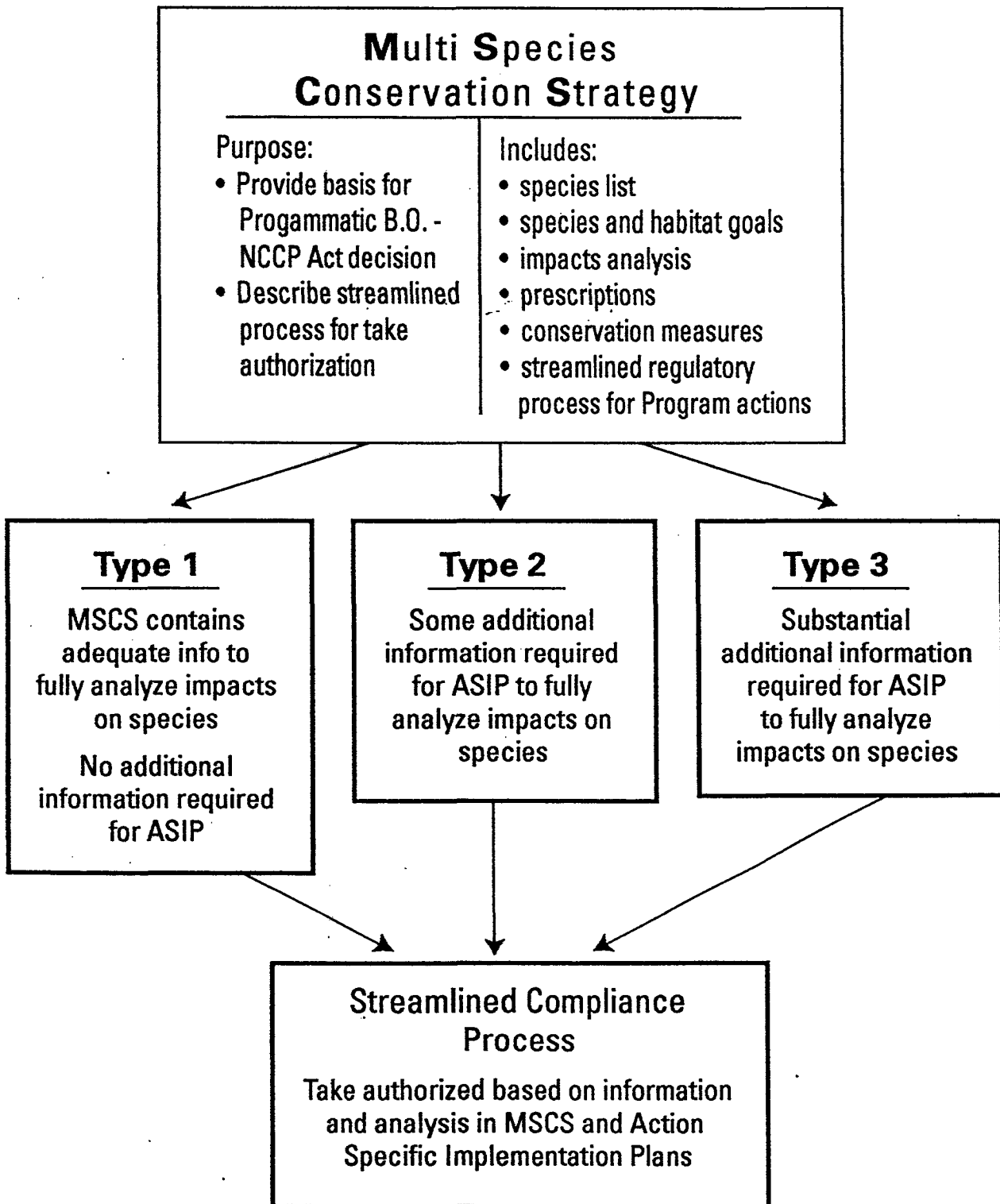
# ***Incidental Take Authorization Process***

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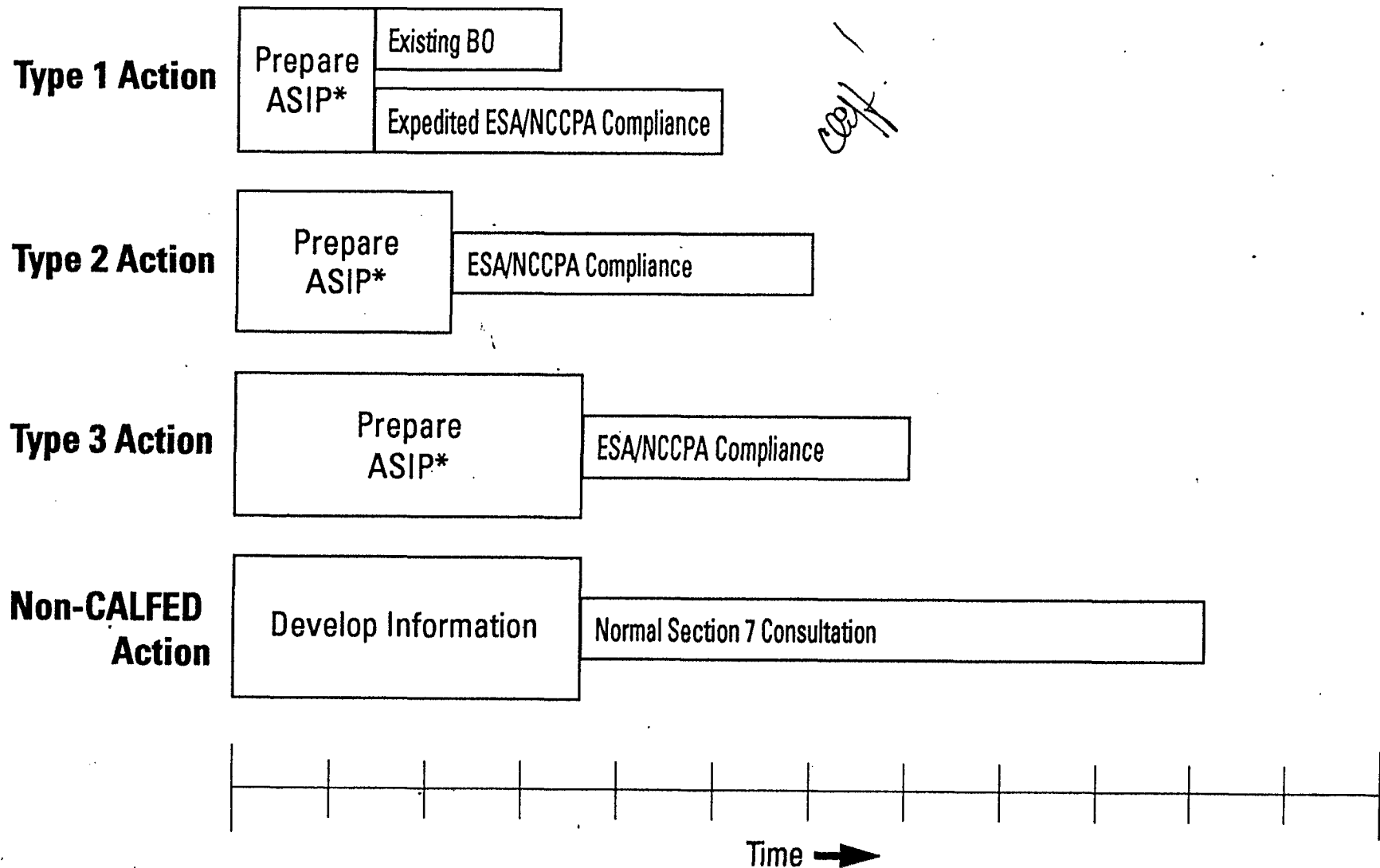
- Programmatic MSCS - framework for authorizing take
- Action Specific Implementation Plans tiered to MSCS (based on bundled actions, individual actions, etc.) which:
  - Identify action specific impacts by species and habitats
  - Identify action specific conservation measures
  - Identify specific mechanisms for authorizing take (ESA Section 7, F&G Code Section 2835, etc.)



# ***Multi-Species Conservation Strategy Framework***



# ESA/NCCPA Processing Time for CALFED Program Actions



\*Action Specific Implementation Plan



## **Monitoring Program**

- **Compliance**
- **Effectiveness monitoring**

## **Adaptive Management**

- **Based on monitoring species and habitats**
- **Measured against conservation goals (species and habitats)**
- **Scientific review and recommendations**
- **Adaptive management will be phased in**



## Assurances regarding compliance with state and federal endangered species acts

- Neighboring landowners
- Levee repair and maintenance
- Landowners adjacent to restoration and enhancements in watersheds
- Participants in a screening diversion program  
*opt in → priority reviewed*

Assurances are phased

Assurances regarding future CALFED actions

